State of Louisiana
Department of Health and Hospitals

Mass Fatality Framework

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I. Introduction

Executive Summary

The State of Louisiana is vulnerable to a variety of hazards that threaten its citizens, communities, businesses, economy, and environment[i]. In addition to natural hazards that have devastated Louisiana, the natures of the petrochemical industry as well as tourist attractions create a high-risk profile for the State with regards to industrial accidents as well as intentional destructive incidents. As a result of any intentional-release incident or accident, there may be heavy casualties and numerous fatalities.

Mass fatality planning is part of an overall, all-hazards emergency preparedness and response[ii] performed in Louisiana by the Department of Health & Hospitals (DHH). DHH handles Emergency Support Function #8, and is inclusive of support agency in managing human remains, including victim identification and mortuary affairs. This Framework is refined and fully developed with the guidance of DHH staff, the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), volunteers with DMORT experience, and the 64 parish coroners. Information regarding capabilities and resources continues to be gathered, and anchors this process. No plan will ever be able to capture all contingencies; however, having an established and practiced plan provides the direction and guidance needed during the crisis[iii].

Mass fatality events due to unnatural causes – for example, bioterrorism agents such as anthrax, smallpox, Ebola or other biological weapon of mass destruction – are homicides and, as such, come under the primary jurisdiction of the parish coroner for management and disposition[iv] – though there is a close symbiotic relationship with the State DHH resources. Events such as hurricane, flood, earthquake, pandemic influenza, and other "natural" but catastrophic events result in deaths due to accidental causes and circumstances and are also coroner cases. By utilizing this Framework, parishes can prepare to work with the Louisiana Department of Health and Hospitals as the primary investigator of the unnatural deaths resulting from intentional incidents, duties beyond the routine management of deaths locally due to "acts of God," or pandemic events.

During any mass-fatality event, a surge in deaths will overwhelm the resources, personnel, funds, and planning efforts of the medical care community, law enforcement investigations units, and the funeral and disposition care community, as well as the coroner system.[v] Routine exposure to potentially infectious remains and a possible absence of protective equipment may result in physicians and members of the coroner's community themselves being overcome by the same illness that is contributing to the high death rate.[vi] This document reflects federal recommendations for improving planning, guidance in

preparedness documentation[vii], the State of Louisiana Emergency Operations Plan[viii], and best practices in the mass fatality management field.

Plan Content Overview

The implementation of parish and regional plans formulated on this Framework rests on the following progressive steps:

1. A disease outbreak, intentional release event, accidental incident, or natural disaster overwhelms the local coroner's ability to handle the mass fatality events – including any resources available through mutual aid or memorandums of understanding. The parish coroner is accountable and responsible for activating the mass fatality framework. The trigger is variable by parish and region – for example, while Orleans Parish may consider 300 deaths in the period of 24-48 hours the trigger for mass fatality implementation, this would overwhelm other parishes where they routinely offer mutual aid and storage of remains (such as St. Bernard or St. John parishes).
2. Notification by the coroner through the parish Office of Homeland Security and Emergency Preparedness will occur with the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) establishes Emergency Operations Centers (EOC) at the state level, to support local-level operations.
3. GOHSEP notifies the Governor, and a determination is made for an emergency declaration – for the event and for which parishes within the State.
4. GOHSEP notifies the Department of Health and Hospitals (DHH) of such an event and the nature of the catastrophe – if it has been identified. DHH is a member of the over-watch team at GOHSEP's EOC.
5. When resources are requested locally through OHSEPs because local-level supplies and resources are exhausted, DHH will respond with items requested by partners or facilitate the request to the federal level.
6. DHH will take the lead on communications through the Bureau of Media and Communications (BMAC). This includes formulating a public information campaign as well as instructions or guidance on families dealing with victims and lost loved ones.
7. The DHH Office of Mental Health (OMH) will be responsible for the content of the messages, drawing upon the experience of the Office's Louisiana Spirit operation that began in the wake of Hurricane Katrina. [Louisiana Spirit staff were key members of the Family Assistance Center deployed to manage the Katrina fatalities.]
8. Additional guidance may be issued at any time by DHH or federal partners, such as the Federal Bureau of Investigation, when a suspected terrorist attack is cause for mass fatalities.

Once a disease outbreak has occurred or a chemical incident/natural disaster has overwhelmed the local ability to respond, the State will identify key hospitals in each region (pre-identified) will be designated as Institutional Collection Points (ICP), to assist local coroner's offices and pre-established partnerships they have already instituted. Further,

Regional Collection Points (RCP) may be established to collect ICP remains as these resources are consumed and to transition to a temporary interment site.

Only in the case of last resort – when military hermetically-sealed containers are unavailable – will temporary internment locations be considered and/or utilized. DHH has completed a Memorandum of Understanding with the Department of Corrections for the use of land, inmate labor and prison equipment for the temporary interment task (MOU attached).

Applicability and Scope

The DHH Mass Fatality Framework is applicable to a wide range of potential emergencies or threats with the origin being natural, man-made, or accidental. This includes, but is not limited to: natural disasters including pandemics, accidents, technological failures, workplace violence, and emergencies related to foreign or domestic acts of aggression. Some of these hazards may produce emergencies that impact a small area or a single parish, while others may result in a more severe and widespread emergency. The scope of this Framework applies within the State of Louisiana and as such Memorandums of Agreement or Mutual Aid Contracts with other States for which Louisiana services are applicable.

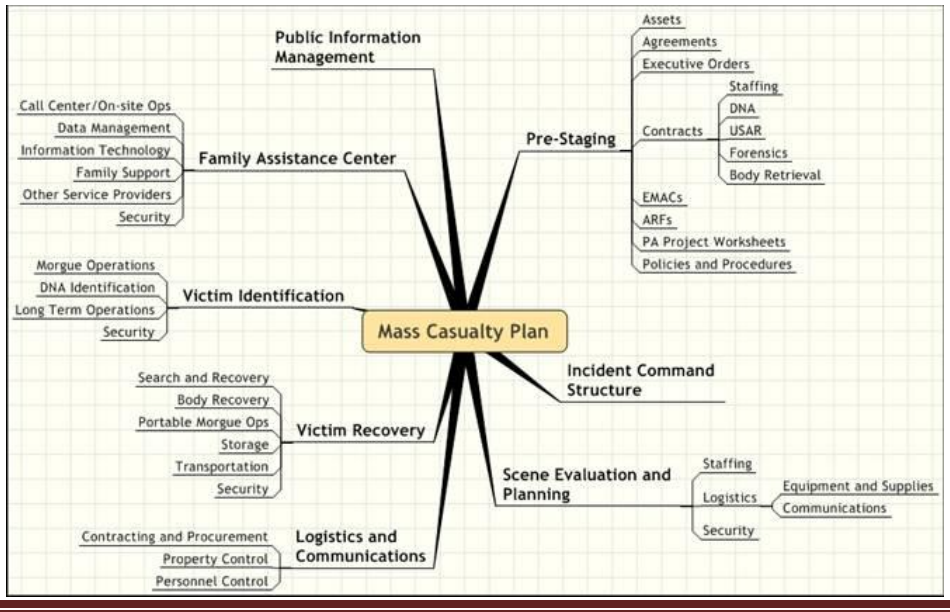
II. Concept of Operations

Objectives

The primary objectives for the Mass Fatality Framework include:

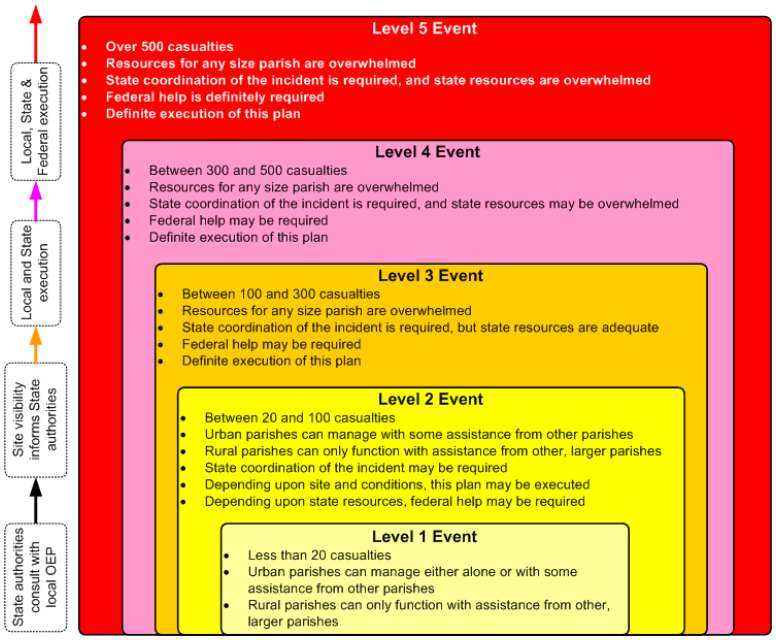
- To prepare DHH for assisting local coroners in managing a mass fatality and mitigate operational gaps.
- To identify decedent operational areas, the stakeholders and organizations responsible for these operational areas, so that parishes and regions may develop a plan for providing and for coordinating operational activities.
- To specify the command and control structure, designate authority for Mass Fatality Framework activation, and establish criteria for levels of activation.
- To present information on and references for the decedent operations.
- To provide information on infection or other health and safety threats, such as mass fatality information systems, pandemic influenza considerations, security requirements, family, cultural, and religious considerations, and staff and volunteer management.
- To provide updated resources for mass fatality references, including procedures or recommendations for contaminated remains autopsies, waste handling, and personal protective equipment information.

The graphic below is an illustration of the contents of this Framework.



Assumptions

1. There will be a severe shortage of personnel at all levels of the private and public sector that will hamper and significantly impede the deployment of resources for victim recovery. DHH is using a severity model that will be tailored to the specific capacities gained from the coroner/hospital survey. The current assumptions are depicted in the chart below.



Given these trigger points, the plan assumes that local and state authorities will be quickly overwhelmed after day 30 as fatalities escalate both within medical institutions and in homes.

2. Concurrent with the shortage of personnel and facilities, there is an assumption that there will be a shortage in storage space for victims. In 2007, DHH conducted the first statewide coroner's survey (48% response rate). The data obtained from that survey was combined with survey data from hospitals (acquired that same year) to give an initial picture of the statewide storage capacity in the event of a pandemic emergency.

3. Given that storage is a key link in State planning assumptions for the management of the expected number of fatalities, it currently drives several core elements in the Concept of Operations. Summary data for the storage estimate model is presented in later in this Framework within the Planning Section.

4. As has been experienced in the State, a natural disaster may destroy or seriously disable the existing infrastructure for appropriate and timely handling of remains. It has been strongly encouraged, and acted upon for many parishes, that local mutual

aid agreements be enacted as well as partnerships with the parish Office of Homeland Security and Emergency Preparedness for additional resource identification, including personnel, supplies, and other support for operations.

5. Given the nature of many of the mass fatality scenarios, including pandemic influenza, this Framework assumes that there will be no significant federal assistance forthcoming (as called for in Level 4 and 5 events). This assistance would normally include Disaster Mortality Operations Recovery Team (DMORT) for recovery and management, thus driving several of the strategies outlined in this Section.

6. While the coroner should plan to train his/her personnel to operate within a contaminated area while wearing personal protective equipment (PPE), it is recognized that due to routine personnel constraints that not all parishes or regions will have personnel trained in the use of Level C PPE, let alone a few select individuals trained in the use of Level A and B PPE. Mutual aid with HAZMAT teams or other specialty groups (such as the Louisiana National Guard 62nd Weapons of Mass Destruction Civil Support Team, hereinto referred to as the 62nd) may be necessary for expertise, equipment, and/or personnel.

7. Public health and clinical laboratories will need to manage increased numbers of requests for influenza testing. CDC will work with state public health laboratories and the Laboratory Response Network (of which, the Office of Public Health Laboratory is a member) to provide clinical laboratories with guidelines for safe handling, processing, and rapid diagnostic testing of clinical specimens from patients who meet the case definition of pandemic influenza. The DHH Office of Public Health Laboratory will provide clinical laboratories within Louisiana with any CDC guidelines. The Office of Public Health Laboratory will provide coroners with specimen submission forms that specify the clinical and epidemiologic data that should accompany specimens sent to the Office of Public Health Laboratory for testing.

There are also specific considerations regarding events where contaminants may impact decedent handling, coroner staff-contagion exposure, and/or release of bodies to family members. Agent/disease specific protocol will be issued at the time of the incident by the State Health Officer in conjunction with the State Board of Coroners.

Chemical or Biological Episode (Intentional or Accidental Release)

Commercial or industrial chemical agents have the potential to cause a major public health disaster that is highly comparable to that of known military agents.[ix] One of the main differentiating factors between chemical and biological disaster from a mass fatality standpoint is the timing of exposure through mortality – the first sign of a biological attack could have an incubation period from hours to weeks[x] whereas chemical agents typically have symptomatic onset from seconds to a few minutes[xi].

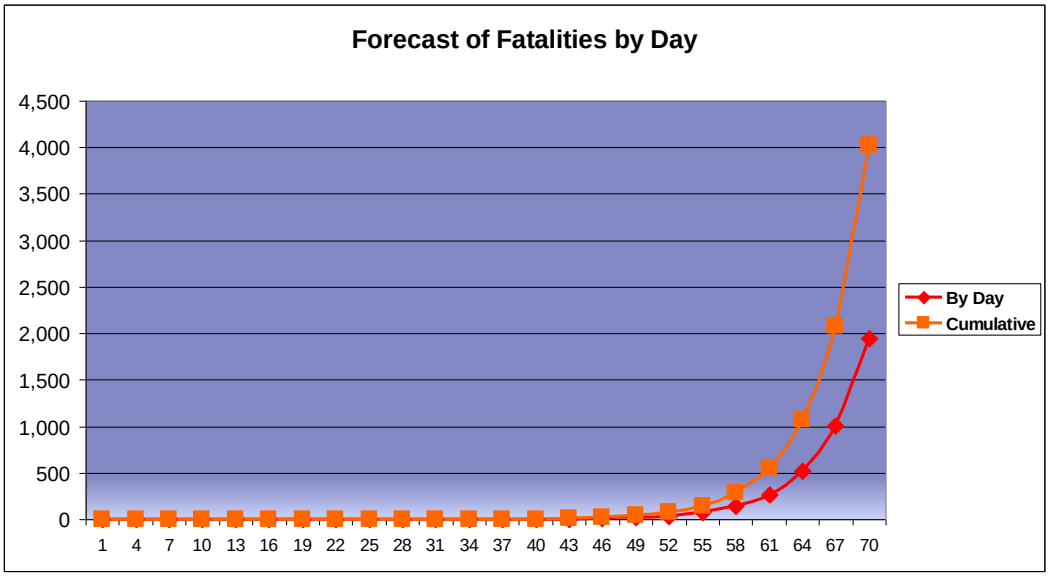
In preparing and mitigating for chemical or biological agent-induced mortality, hazard awareness and recognition or essential for the protection of coroner's workers. While it is probable that in most mass fatalities, the agent will be previously identified prior to coroner intervention, it is not guaranteed. It is assumed, however, that coroners and staff will have training in mortuary science that appropriate handle investigative techniques with biological or chemical weapons of mass destruction as well as chain-of-evidence preservation.[xii]

Risk assessment for potential biologic terrorism is at best an uncertain process.[xiii] Characteristics of an intentional perpetrator are not traditional components of most environmental health hazard identification, and must incorporate a threat assessment performed by the intelligence community.[xiv] Potential criminal aspects of the forensic investigation must also be considered in addition to the more routine considerations of health concerns with human remains. It is anticipated that local HAZMAT teams and the 62nd will be heavily utilized when dealing with chemical attacks, both for gross/detail decontamination as well as equipment for coroner technicians to enter the hot zone.

Basic HAZMAT handling courses and containment precautions should be taken on an at-least annual basis, especially recommended for areas that have either higher-than-average accidental releases incidents or are considered targets for intentional activity/release, as stated in the Governor's Office of Homeland Security and Emergency Preparedness Hazard Mitigation Report from 2008.[xv]

Pandemic Influenza

Based on clinical data of previous pandemic events, significant numbers of deaths do not appear to occur until after the first 30 days of the sentinel case. An example of a forecasted pattern for pandemic fatalities is reflected in the chart below:



As clinical modeling is a complex mathematical process influenced by a variety of factors in the analysis, there are a number of simulated outcomes of this pattern that cannot be included in this summary. For further information on forecasting predicted mortality rates, the DHH Infectious Disease Epidemiology Director should be contacted.

Roles and Responsibilities

With interactive support between the various levels of government, efficiencies of scale can be more easily met. Specific roles and responsibilities are inherent within each jurisdiction, with a general overview of those support functions listed here specifically for the DHH Mass Fatality Framework.

Department of Health and Hospitals (DHH)

- The DHH will provide medical intelligence from the State Health Officer, State Epidemiologist, Regional Medical Directors and other public health professionals to the Coroner's offices.
- The DHH will provide – if requested – via the state cache, any items needed by the parish coroners. This may range from office supplies such as pens/paper to personnel, office staff, or other support services.
- The DHH will also make available, if public supplies falter or the episode overwhelms supply chain mechanisms, appropriate personal protective equipment supplies, including such items as gloves, face masks, body bags, refer units (trailers or room-cooling devices), waterproof tagging systems, and other incident-specific items.
- The DHH will coordinate, with GOHSEP, the identification and tasking of tractor drivers with tractors (for 18-wheelers) to assist in the movement of locally-owned assets, for the deployment and location of temporary morgue vehicles. It is anticipated and expected by local coroners that the remains and personal property moved in these trailers will be totally decontaminated, just as is the anticipation with contaminated patients in an ambulance; therefore, the tractor driver does not need special HAZMAT endorsement.

Department of Corrections (Corrections)

- The DHH has entered into a Memorandum of Understanding for land use for temporary internment sites, which is recognized as a last-resort for mass fatality caseload.
- Corrections will provide inmate labor and prison equipment to assist and complete temporary internment, if last-resort is necessary.
- The DHH will provide the equivalent level of support for inmate labor (education, personal protective equipment, etc as appropriate to the tasks being completed) as received by other DHH support personnel, including those activated through the

State volunteer medical teams.

DHH Office of Public Health (DHH OPH)

- DHH OPH will ensure that educational reminders are distributed to all DHH staff regarding appropriate hygiene/infection control measures, absences from work, and expectations for the disaster response and recovery.
- DHH OPH will activate healthcare providers (most probably through the State volunteer program controlled by the Center for Community Preparedness) to supplement public resources, should the medical surge capacity be overrun and unable to safely manage patient volume.

DHH OPH Infectious Disease Epidemiology (ID Epi)

- OPH Infectious Disease Epidemiology will continue to conduct disease surveillance and epidemiological investigation.
- ID Epi will provide ongoing information with respect to mortality rates, outbreak and severity of illness, in order to assist in the distribution of the State and federal cache (if the federal supplies are shipped from the CDC to Louisiana).

DHH OPH Laboratory (Lab)

- The Office of Public Health Laboratory is a functional member of the Laboratory Response Network (a national surveillance lab network) and will assist in the identification of the agent causing mass fatalities if it is not readily apparent (such as drowning).
- The State OPH Laboratory Director or designee will coordinate communication with the State Epidemiologist or designee and the Center for Community Preparedness Director or designee.

DHH Bureau of Media and Communications (BMAC)

- The DHH Bureau of Media and Communications (BMAC) will actively work a media campaign throughout the State for educating the general public as well as special partners/interest groups (such as regional/parish government staff, first responders, and media outlet talking points). These topics will include decedent remains contamination, safety methods, temporary internment processes, as well as personal hygiene information specific to the public health emergency.

DHH Office of Mental Health (OMH)

- The Office of Mental Health will provide message support to the Bureau of Media and Communications regarding fatality psychological support.

- OMH will support BMAC in developing communications concepts, messaging copy, and general stress management information – for public information as well as employee education.

DHH OPH Center for Preventative Health-Immunizations (CPH-I)

- CPH-I is responsible for issuing vaccination procedures for countering the causal agent, when such an inoculation is available.
- CPH-I will provide the framework for any mass vaccination events, endeavoring to include Coroner's office coordination for their field assignees.

DHH OPH Center for Community Preparedness (CCP)

- CCP will ensure that the HAN has been updated and confirm receipt of HAN messages for staff as well as distribution groups.
- CCP will coordinate volunteer communications through LAVA, recruiting new volunteers and directing existing personnel to appropriate locations throughout the State for additional support – including hospitals or other health care providers, critical infrastructure businesses, or supplementing government ops.
- CCP will manage the warehouse where supplies are stored (confidential "Receiving, Staging, and Storing" or RSS location), and will maintain accurate data in the inventory management system (IRMS).
- CCP will coordinate and execute the distribution of medications via the RSS site (or contingency contracted partners) and the contracted courier.
- CCP will tabulate and report necessary documentation to the CDC as well as request asset resupply, if necessary.

DHH OPH Pharmacy

- The DHH OPH Pharmacy will work with partners, such as retail pharmacies or "Point of Dispensing" (POD), to establish a mechanism of medication delivery for the uninsured and/or underinsured, pursuant to the Emergency Use Authorization and Standing Orders issued by the SHO, if the causal agent has a known and effective countermeasure. This may also include educational material dissemination.

DHH Office of Vital Statistics (Statistics)

- Statistics will add surge capacity to facilitate the registration of deaths and issuance of final disposition permits.

Parish Coroner's Office

- The Coroner's Office capacity for managing a mass fatality event determines the first activation level. Local capacity is a combination of morgue storage capacity, available personnel, and available equipment and supplies. Thresholds for levels of activation are based upon local capacity and are at the discretion of the parish Coroner.
- The level of activation will depend on the anticipated number of deaths, the scope of destruction/level of difficulty in recovery, and whether or not there are possible biological, chemical, physical, or radiological hazards.

Additional Support

- The local funeral homes and ministerial alliance will add surge capacity to provide for timely mortuary, crematory and burial services.
- Any hospitals or other medical facilities in the State that have mortuaries will provide decedent storage as available. This may also include appropriate storage at locations within the 'death care' industry, in privately-held/owned locations.
- Local, state and federal resources assistance will be requested as needed based on the nature and complexity of the incident.
    - Key federal resources that may be requested include, but are not limited to:
        - Department of Homeland Security (DHS)
        - Federal Emergency Management Agency (FEMA)
        - Federal Bureau of Investigation (FBI)
        - Disaster Mortuary Operations Response Team (DMORT)
        - Disaster Medical Assistance Team (DMATS)

Operational Considerations

Many recommendations and suggested guidelines are adapted from the United States Army Soldier and Biological Chemical Command as well as the contents of the Santa Clara County Public Health Mass Fatality Planning Toolkit[xvi]. As the coroner functions are decentralized in the State of Louisiana, this Framework is intended to provide assistance with process and procedure development within the regions and parishes of the State. It does not delineate required methods of handling decedents, decontamination requirements, or particular stepwise handling of scenarios. Rather, it sets expectations for appropriate and industry-standardized approaches to mass fatality planning while allowing response as well as control at the local level.

Mass Fatality Operations Activation

As all emergencies are handled at the most-local government level possible, a mass fatality operation may be enacted at the discretion of the Parish Coroner. The Coroner will be notified of the incident through a call from a local first responder at the incident site, the parish Emergency Operations Center/Office of Homeland Security and Emergency Preparedness, various media outlets, and/or other emergency notification systems.

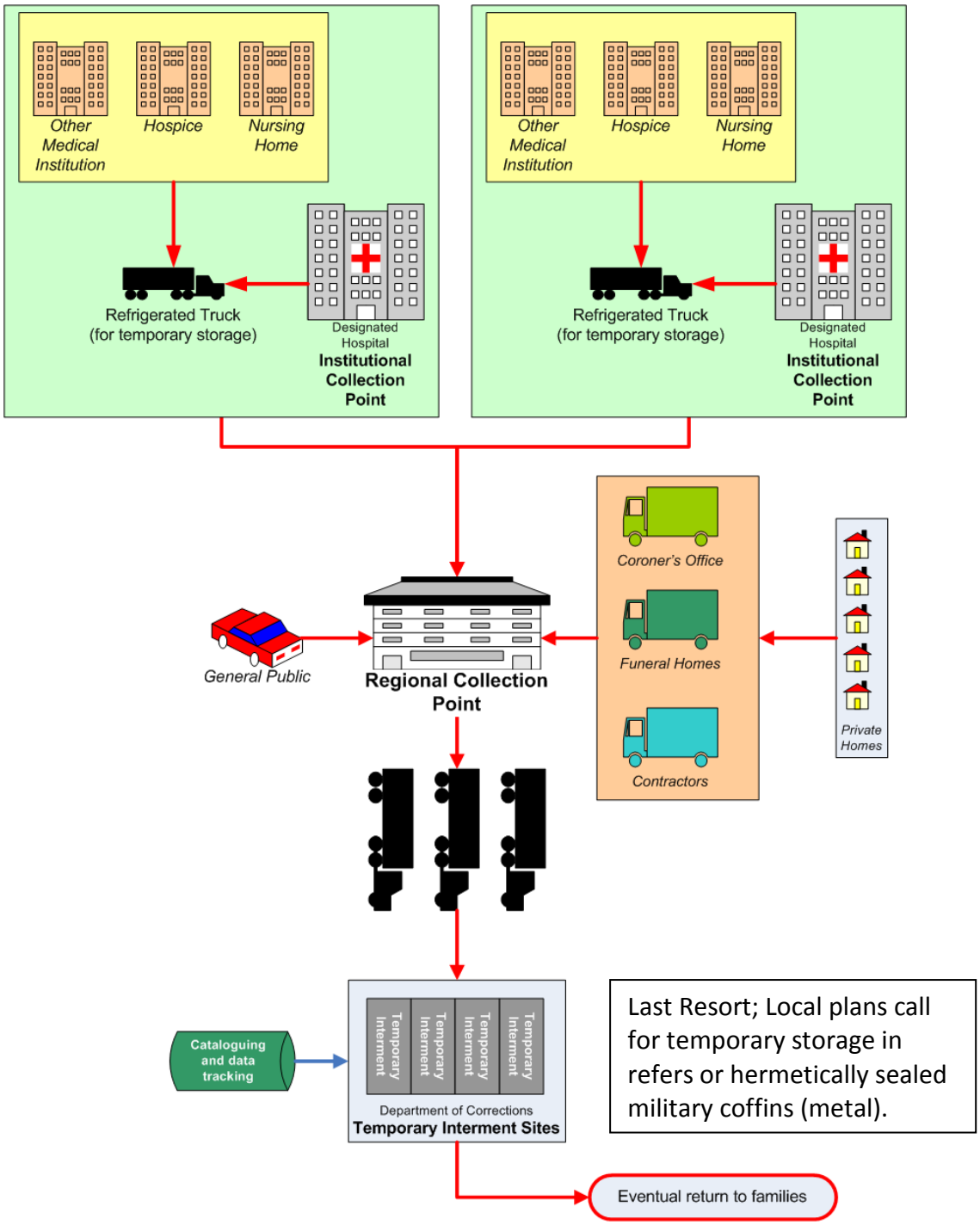
Isolation and Quarantine Precautions

To contain the spread of a contagious illness, public health authorities rely on many strategies. Two of these strategies are isolation and quarantine. Both are common practices in public health, and both aim to control exposure to infected or potentially infected persons. Either or both may be undertaken voluntarily, or may be instituted compulsory by public health authorities (usually the State Health Officer, but may also be a Public Health Regional Medical Director). This isolation and/or quarantine may apply to healthcare workers or coroner's staff, depending on events.

Complete details of the Louisiana Isolation and Quarantine plan can be found in the State of Louisiana Emergency Operations Plan.

Overview of Operations

The general concept of operations is as follows:



Understanding this is a framework of operations, the details below are to assist DHH staff in understanding the details of local coroner plans. Each parish is autonomous for planning and executing policies and procedures, and has individual mass fatality plans (typically with mutual aid agreements to facilitate/augment local assets). This framework is a guideline of operations only, and details on specific resources as well as processes are deferred to the local parish Coroner's office. In principle, the following are generally accepted guidelines.

Initial Evaluation Team

NOTE: Due to contamination concerns, much of the initial coroner's investigation will be performed at the incident site.

The coroner will need personnel who can be part of an initial evaluation team whose objective is to enter the hot zone and formulate the best approach for processing the scene and processing remains. The team approach is recommended to include a minimum of four members, each having distinct objectives for reviewing the scene. The IRP recommends that the team consist of the coroner investigator, a Federal Bureau of Investigation (FBI) HAZMAT Technician, a law enforcement evidence collection technician, and a forensic odontologist. Members should be selected based on the overall mission to collect evidence and to determine the cause of death. Upon conducting the evaluation, each agency involved will be better able to formulate an incident specific mass fatality management plan.

The initial evaluation team should specifically identify the total number of remains, their location and any complicating factors, i.e. fragmentation or difficult excavation. The second priority includes identifying which remains require a full autopsy.

Knowing the total number of remains and the specific number of those that require an autopsy will help the coroner plan the morgue operation. Though it is primarily the role of the Coroner to determine the best approach for managing remains, input from all team members may be helpful. Each agency works within certain operational and resource constraints that may influence how the incident site is processed, e.g. the need to gather enough evidence to prosecute the criminal case. Thus, the information gathered via this initial evaluation team, will serve as the basis from which all agencies can collectively agree on an organized approach to process the incident site, e.g. who will be performing which tasks, when each agency will perform their tasks, and what assets must be mobilized to support the task.

Additional Personnel

Handling remains is the responsibility of the local coroner, but in a mass fatality situation handling a large number of remains will likely exceed the capability of their staff. The coroner will need additional trained personnel to assist with physically handling remains. In most cases, there will be personnel at the incident scene who are equipped to assist with

certain operations inside the contaminated area. The coroner may be able to obtain enough personnel trained to use PPE to support recovery and handling of remains by requesting help from the FBI, the local law enforcement agency, the fire department, and/or supporting specialized military teams such as the Louisiana National Guard 62nd Weapons of Mass Destruction Civil Support Team.

In the case of a suspected intentional release of chemical or biological substances and the criminal nature of the incident, remains are evidence and jurisdictions should not grant non-coroner personnel unrestricted access to the remains. Those handling remains should be arranged in teams with an FBI and coroner's representative who oversee all movement.

Other issues the coroner should consider when planning a response to a chemically contaminated incident site are the inclusion of DMORT as a resource enhancement, addressing the issue of organ transplant requests during a disaster, and handling contaminated animal remains.

When planning a response to a chemically contaminated incident, coroners may consider including the resource and capabilities of DMORT. It is an organized team with the experience and expertise to manage a large number of fatalities. The teams are comprised of private citizens with expertise in victim identification and mortuary procedures. The team is federalized when they respond to a presidential declared disaster. DMORT works under the authority of the local jurisdiction. They can:

- Provide a mobile morgue.
- Perform autopsies.
- Perform identification of remains.
- Perform tracking of remains.
- Establish and operate a family assistance center.
- Provide ante-mortem data collection.
- Provide assistance for the recovery of remains in non-contaminated settings.

DMORT does not establish command and control over the fatality management operation. The local coroner maintains responsibility to recover remains as well as sign death certificates.

Identification and Collecting Evidence

Each parish has its own protocol that the coroner follows when collecting evidence and identifying victims. Routine considerations and technique are usually applied for fingerprinting, dental examination, x-rays, DNA sampling, or subjective recognition. For some coroners offices, after taking possession of the decedent at the facility, investigation may range from one to two hours, without complicating factors, prior to proceeding to the autopsy.

Special considerations – and potentially special training – are necessary when working in a chemically contaminated situation. Some considerations may include the following items.

- Remains must be decontaminated before they are removed from the incident site to minimize cross-contamination and make the remains safer to process. Evidence critical to the investigation may be lost through this process.
- It is likely that remains may have already been partially washed as part of the overall incident decontamination effort; however, they will still undergo a gross decontamination before being removed from the scene.
- The coroner should attempt to gather as much evidence as possible prior to gross decontamination.
- All remains must undergo a thorough external evaluation. Coroner personnel should collect body-surface swab samples for chemical agents, and obtain samples of tissue, blood, and fabric.
- Part of this evaluation should include a preliminary identification check.
- Some personal effects may be considered evidence. Personal effects identified as evidence should be removed, tagged and directly handed over to the FBI.
- Coroner personnel should place evidence in glass containers as many plastics allow certain chemical agents to seep through the material.

Tracking

The United States Army recommends tracking of remains using waterproof tags needs to begin at the recovery phase of the operation. Decontamination makes it difficult for the coroner to track remains by ordinary methods. Several parishes utilize both red plastic tagging systems with indelible marker or metal tagging systems. As remains are decontaminated at the incident location, the coroner should consider using a durable waterproof tool.

Disaster methods of tracking have been tried in Louisiana in the past decade, and each parish has methods to handle remains and belonging tracking for their locality. However each local jurisdiction can take advantage of several state systems for victim tracking.

First, DHH can make available a victim tracking tool, termed the At Risk Registry. This web-based software application has been tested with a small group of DMORT and coroner volunteers in Louisiana and can be used to track remains from the point of collection through final disposition. This system has the following capabilities:

- Ability for coroners to upload lists of victims or directly enter victim information on site.
- Using state protocols, the coroner's staff can use the system to track the victim's remains through the entire process.

- Ability to provide state emergency managers with statewide summaries showing the progress of the event and the associated numbers of victims managed by local coroners.

Second, The State also has available a GPS tracking system that could be used by victim recovery teams. This system, called TeleNav Track™, is based on a Blackberry™ device with GPS capability. It also has the following advantages:

- It has been tested by DMORT volunteers during the 2010 hurricane season
- It has electronic forms capability and camera functionality. The state has designed a Victim Recovery form that can be completed on the device at the point of victim recovery. A GPS location can be stored and photos of the scene can be taken. The Victim Recovery form has the core data needed to begin completion of death certificates.
- The TeleNav Track™ system has a web-based tracking application that shows the location of each device. Reports on completed forms can be completed and used to capture event snapshots.

Gross Decontamination

Though not normally performed by the coroner, decontaminating remains may become the coroner's responsibility in a chemical WMD incident. However, many parishes rely on the local HAZMAT team for gross and detailed decontamination – though the coroner's staff will go into the field for primary investigation at the remains' site. If the local HAZMAT team cannot accommodate the incident decontamination needs, the 62nd will be requested through the parish EOC, up to the GOHSEP EOC.

The United States Army recommends that coroners use additives when performing gross decontamination. Common additives used in decontamination of chemical warfare agents include:

- Soap, which aids in dissolving oily substances like mustard or blister agent.
- Bleach (sodium hypochlorite), which removes, hydrolyzes, and neutralizes most chemical agents.

Additives increase the level of safety for those handling remains but they can also create tissue decay. The U.S. Army Mortuary Affairs Center conducted studies that indicate the use of low concentrations of household bleach, two to three percent solution with a five-minute contact, produces no negative effects on remains and successfully removes chemical agents. There are concerns that although higher concentrations of bleach solution (five percent or greater) remove chemical agents, they may have negative effects on human tissue and cause tissue decay (U.S. Mortuary Affairs, 1992). Therefore, coroner personnel should use the appropriate solution when decontaminating remains.

After gross decontamination, the coroner should not assume that remains are free of contamination. This can only be determined with low-level detectors (i.e. mass

spectrometers) that are not likely to be available on the scene, unless the presence of the Louisiana National Guard 62nd WMD Civil Support Team has been requested and deployed. Thus, without the 62nd confirmation of total decontamination, remains should be wrapped in two body bags. Personnel should seal the initial body bag with duct tape, rinse the bag, and then place the remains in a second body bag before remains are put into a refrigerated unit. Personnel should wear PPE until all remains are monitored with a chemical detector device and are deemed free of contamination.

It is typically expected by parish Coroner's that the local or parish HAZMAT team or the 62nd will assist with gross decontamination as well as detail decontamination. Coroners do not want the interim morgue refer units to be contaminated with biological or chemical substances.

Detailed Decontamination

Although remains receive gross decontamination at the incident site, those handling remains should not consider them free of contamination. Many types of chemical agents are not easily washed away during the gross decontamination process. All remains must undergo a detailed decontamination, using soap or bleach solution, before an autopsy is performed or embalming takes place. If the decontamination is performed in an enclosed area, it must be ventilated.

When remains are to be embalmed, they should be decontaminated in a separate area or room from the embalming area. Some decontamination solvents such as bleach create toxic reactants when mixed with embalming fluid. As Louisiana Coroners are reliant on HAZMAT teams or the 62nd to complete detailed decontamination, it is assumed that these entities will take every precaution to avoid creating further hazards.

Chemical Agent Monitoring

To ensure that remains are free from contamination, the coroner should monitor remains before releasing them to the community for final disposition. Chemical agent monitoring, is difficult, time consuming, and expensive. Most jurisdictions will require assistance in performing this type of monitoring from specialized military units, specialized HAZMAT teams (i.e. the FBI Hazardous Materials Response Unit, or HMRU), from DMORT WMD, or the Louisiana National Guard 62nd Civil Support Unit.

Whereas sampling the airspace within a body bag is the generally accepted method of verifying decontamination levels, it may be impractical to validate decontamination in this method during a mass fatality operation. In lieu of individual monitoring, the airspace of the storage units using low-level monitoring devices. Coroners should know that that the federal

Environmental Protection Agency does not accept any detectible level of contamination as 'clear' for safe, in this case, handling of remains.

Transportation / Interim Morgue

Transportation includes transportation of human remains, property, and evidence to the incident morgue as well as transportation of personnel and equipment to and from the incident site. Transportation is tasked and staffed through Parish OEP Logistics based on needs identified by the Coroner's Office. It is the preferred method of transport to have 53' refer trailers transport totally decontaminated remains – thus, preserving the utilitarianism of the trailers for the duration of the event as well as future events.

To transport human remains from the incident site to the (temporary) morgue:

- Refrigerated vehicle (could be 53' trailer or railcar) is parked in a secure area near the site with easy access to load remains.
- Remains that have been bagged and tagged are loaded into the vehicle (never stack remains unless appropriate shelving is installed).
- Driver fills-in the Transportation Log as refrigerated vehicle is loaded and reviews for completeness prior to leaving the incident site.
- When not in use, vehicle doors are locked and remain locked while human remains are inside.
- Driver transports remains following assigned route to the incident morgue with no deviations. Police escort may be arranged.
- If owned by the local Coroner's office, preventive maintenance is recommended on portable morgue units (routine inspection and testing of the refer unit, tire pressure and quality of tread, connections to the tractor, etc). Once quarterly is appropriate, with attention given to inspections prior to influenza season as well as hurricane season.

DHH, with the assistance of local volunteers, has developed a set of protocols and supply lists for a typical collection point. These protocols and supply lists have been distributed to local coroners and the State's Mass Fatality Designated Regional Coordinator (DRC) network.

Storage

The local mass fatality plan should identify other locations that can be used for storage. Possible locations include an anatomy laboratory as well as small buildings or rooms that can cool to 37 degrees Fahrenheit. Other options include securing a large air conditioning unit that can cool a room to 37 degrees Fahrenheit. Potential decontamination logistics post-event should also be considered when selecting the location. It is the generally accepted practice by Coroner's offices that refrigeration will kill in a decedent any biological organism except tuberculosis or hepatitis.

Regardless of the type of storage the coroner uses, remains should not be stacked unless shelving units are utilized. Even with shelving units, remains should not be stacked higher than waist level to prevent injury to those handling the remains.

Coroners in Louisiana typically do not embalm; this is the responsibility of the death-care industry (funeral homes). If the remains are released to the death care industry, and if a weapon of mass destruction is suspected, the coroner should obtain the FBI's and US Attorney's inputs before remains are prepared for final disposition to the licensed funeral home. It is possible that authorities will request the coroner to hold some or all of the remains for purposes of gathering additional evidence to prosecute the case. The coroner may need to perform additional autopsies on remains to gather this evidence.

Remains that have been decontaminated in any way should not be stored with remains that have not completed the same level of decontamination. If a decontaminated area is used for contaminated remains, a complete decon of the work area will have to ensue before the area is considered 'clean' again, for storage purposes.

Since 2008, the nine regions in Louisiana have been working to develop region-specific plans for these scenarios. Regional planning templates have been distributed and at least two state-wide meetings have been conducted. Each region is currently pursuing the development of these plans. Our Mass Fatality DRC network continues to support these activities in each region.

Temporary Interment Sites

As previously mentioned, temporary interment is not a desirable process or policy. As in the past (such as Katrina), the military was able to supply sufficient resources for hermetically sealing metal caskets, so that burial, retrieval, and reburial was unnecessary. [Note that hermetically sealed caskets do not require refridgeration.] It is undesirable from a family death care perspective as well as a tracking near-impossibility. Lastly, during a crisis, the media interpretation of temporary interment sites will not translate well to the residents of the state or others.

Only if absolutely necessary, through agreement of the parish coroner, State Health Officer, Infectious Disease Epidemiologist, will temporary interment be considered. If such a drastic maneuver is necessary and agreed to by the parish Coroner, then:

1. Temporary interment will likely become necessary not only to assist in the prevention of the spread of the outbreak.

2. At this point in the planning stage, there are currently at least six TIS sites envisioned for the state as follows:

3. DHH has completed a Memorandum of Understanding with the Department of Corrections for use of the land, inmate labor, and earth-moving equipment in order to establish at least six TIS sites throughout the state (up to nine locations are available).

a. DHH has developed specifications for the temporary interment sites that include:
    1. Grave dimensions
    2. Equipment requirements for the task
    3. Protocols for tagging and tracking victims
    4. Protocols for eventual disinterment and return to families

Final Disposition (General)

If the coroner, the local jurisdiction's health department, and the state's Secretary of Health determine that a public health hazard exists, then the governor can issue an emergency declaration negating current law that requires remains of a decedent to be returned to a family for internment. If the decision is made for the purposes of protecting the public, then there is no limitation established by legal statute pertaining to final disposition. It is possible that the governor and the aforementioned persons will have to make controversial decisions during critical moments following a chemical incident.

Coroners should review and understand their states laws regarding acts of terrorism, chemical agent exposure, and characteristics of a public health hazard.

They should also determine if they have the assets to prevent a public health hazard (i.e. refrigeration assets to prevent decay), as well as the ability to verify that remains are free of contamination (i.e. chemical agent monitoring). It is possible that a public health hazard will exist independent of the chemical contamination, as specific aspects of fatality management are time critical (e.g. recovery) and dependant on certain assets to support the operation (e.g. enough personnel who can wear PPE to process remains).

Family Assistance Services

Although traditional support services constitute in-person coordination and assistance with funeral arrangements and handling grief, in a pandemic event or potential contagion situation, it is highly recommended that personal meetings cease and desist. Virtual conversations – through telephone or internet support, including teleconference (where feasible) – are a more appropriate method of controlling the spread of disease while providing these types of services[xvii]. In addition, as estimates show approximately eight to ten family members converging on an assistance center for support per decedent[xviii], in order to protect the security of the incident location, remains, and personal property (which may also be evidence, depending on the causal nature), safety of coroner personnel and the public endorses this position.

Information can be centrally coordinated, through DHH OMH and BMAC, so that work load on support services is lifted from the Coroner's office while they process the increased volume of cases. As a result of Louisiana's disaster experiences, much of the support materials have already been created by Louisiana Spirit, and can be collocated for ease of public use. Hotlines (such as 211) are also already in service for case management – inclusive of financial assistance, housing information, mental health support services, and other topics that are critical to families in times of disaster.

Because of the Katrina experience, Louisiana has a well-developed Family Assistance Center operational plan.

Other considerations

Organ Donation/Transplant

The coroner may receive questions regarding organ donation and transplant when patients die from complications following chemical agent exposure. Some patients that were transported from the incident site may die in the hospital and family members may request or be asked to consider organ donation.

Although chemical agent exposure does not necessarily preclude organ donation, the coroner may consider attending to these cases a low priority. If a person dies in a hospital

and a contributing factor is the chemical agent exposure, the coroner must also decide if an autopsy is warranted before the death certificate is signed. Under these circumstances, it is likely that there will be too many other concerns for the coroner to address that may prevent him/her from responding to donor cases in a time critical manner. Furthermore, it is also probable that no one will take the risk of transplanting organs from such a donor, even if it is deemed safe.

Contaminated Animal Remains

Although not specifically their responsibility, coroners may be asked to address the issue of contaminated animal remains following a chemical terrorist incident. A serious health risk may exist when large numbers of contaminated animal remains are in public areas. The local animal control agency may consult with the coroner as to how they should gather and dispose of animal remains since they could be considered part of the crime scene. It is possible that contaminated animal remains may not only be located within the incident site but may also be located throughout the jurisdiction.

Coroners should provide animal control personnel with the following answer:

- The local animal control department or the Louisiana SPCA should consult the FBI to determine if these animals' remains need to be held for evidence or if they can be disposed.
- Animal remains should be collected, tagged, and identified according to the specific area where they were found, if they are considered evidence.
- Small animal remains can be sealed in 55-gallon hazardous waste drums, and given to the FBI.
- The local animal control department can also consult with the State Veterinary Services and request cremation for larger animals.
- Those handling animal remains must wear Level C PPE unless the Incident Commander specifically states that a different level of PPE is acceptable, e.g., plastic gown, foot covers, facemask, and butyl gloves.

The coroner may also encounter questions from private animal burial agencies. Morticians report that people have a tendency to treat pets like family members and may desire burial services. Thus, the medical examiner may need to advise these agencies as to how these animals should be properly handled and disposed.

III. Planning

Preparedness

The State constantly seeks opportunities to work with local partners and assist with event-specific planning, though due to the sensitive nature of mass fatality planning, the extent of the partnerships and/or discussions may appear more limited than in other areas of preparedness and mitigation. As various aspects of the State plans and framework have been exercised or drilled in accordance with the Louisiana Emergency Operations Plan previously cited, this provides a strong community response and cooperation.

As stated earlier, DHH has initiated a regional mass fatality planning effort supported by DHH staff and our Mass Fatality DRC network.

Estimated Capacity Availability

For the coroner's survey, all 64 parish coroners were polled, with a response rate of 48%. To complete an estimate that includes non-responsive coroners, the following baseline was utilized:

	Refrigerated Storage Capacity		
	Minimum	Most Likely	Maximum
Large Parish	3	10	30
Small Parish	0	2	6

Based on population estimates, size categories were created for each non-responsive coroner to determine an initial estimate. Further, it is recognized that the total storage capacity (and workforce) could not be dedicated to mass fatality management as other "normal course of events" deaths would continue to occur. For both the coroner operations and the hospitals, it is then assumed an "availability rate" as follows:

Coroner Storage	Minimum	Most Likely	Maximum
% Aval. Lkly	0%	50%	90%
% Ava. Unlkly	10%	30%	90%

Hospital Storage	Minimum	Most Likely	Maximum
% Aval. Lkly	0%	15%	70%
% Ava. Unlkly	10%	30%	90%

Given these assumptions, the estimated potential available storage capacity by parish and by DHH Administrative Region is as follows.

Coroner Operations

Region	Morgue Capacity	Percent Available for Disaster	Net Capacity for Disaster
1	131	47%	61
2	24	47%	11
3	42	43%	18
4	74	43%	32
5	11	43%	5
6	34	43%	15
7	35	43%	15
8	25	43%	11
9	51	47%	24
Totals	**427**		**192**

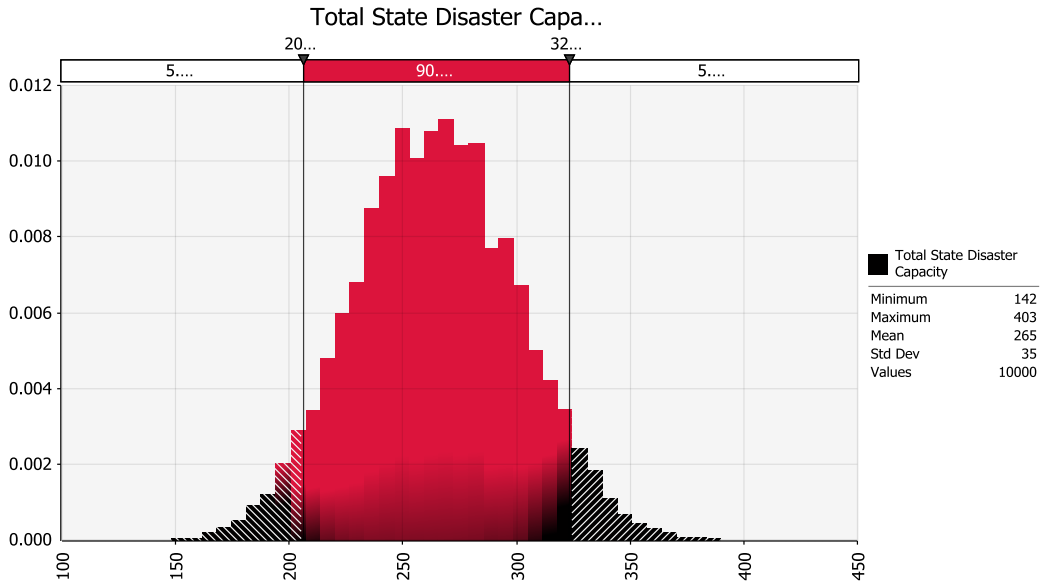
Hospital Operations

Region	Hospitals	Hospital Storage	Percent Available for Disaster	Net Capacity for Disaster
1	17	60	28%	17
2	24	42	28%	12
3	11	7	28%	2
4	33	24	43%	10
5	15	6	43%	3
6	18	20	43%	9
7	23	33	43%	14
8	26	9	43%	4
9	21	7	28%	2
Totals	**188**	**208**		**73**

Summary, Total

Region	Total State Capacity	Total State Disaster Capacity
1	191	78
2	66	23
3	49	20
4	98	43
5	17	7
6	54	23
7	68	29
8	34	15
9	58	26
Totals	**635**	**264**

Because of the uncertainty of the assumptions used in the modeling, the following chart shows the potential distribution of storage capacity available at any point in time in the state (reminder – these are planning factors only):



Given the uncertainty, the statewide storage capacity could range from 206 to 323 spaces (90% confidence level given the current source data).

Ongoing refinement of the data continues. Reassessments for coroners and hospitals will be scheduled once per fiscal year. In addition, licensed funeral homes will also be included. [The funeral homes were not included in the initial survey as feedback from several funeral directors indicated that the limited storage capacity of most funeral homes would be immaterial to any statewide estimate. However, this will be confirmed in the upcoming survey.]

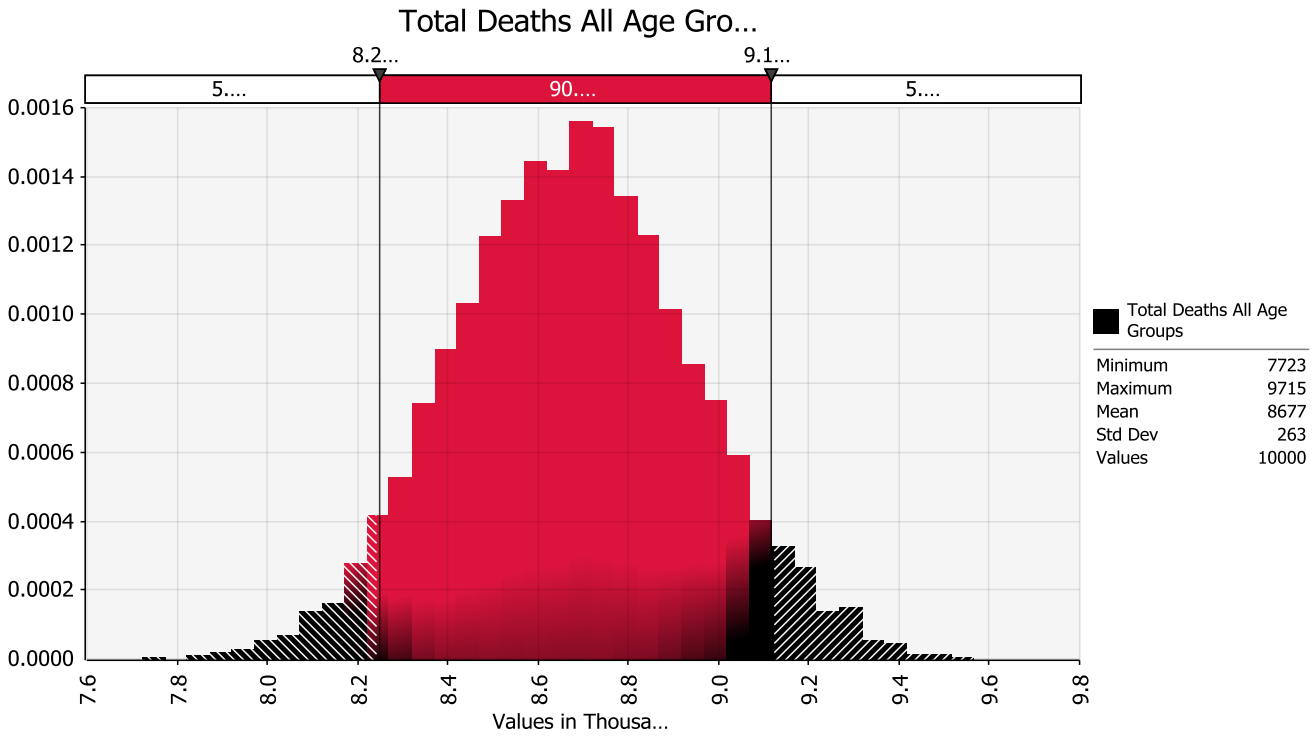
Mortality Estimates

In tandem with the estimate of the total statewide storage capacity, estimates of the number of deaths that might occur during a pandemic were used as an illustrative mass fatality scenario with the understanding that biological incidents will have fatality rates generally along these patterns while chemical events will have much more rapid onset of death.

The influenza attack rates and mortality rates by age group were obtained from FluAid estimates used by the Office of Public Health. It should be noted that the predictive model used to calculate the following statistics may be adjusted to account for different attack and mortality rates that may have more validity for an ongoing pandemic event.

	Minimum	Most Likely	Maximum
Attack Rate - 0-19	25.00%	32.00%	40.00%
Attack Rate - 20-64	25.00%	32.00%	40.00%
Attack Rate - 64+	15.00%	20.00%	25.00%
Fatality Rate - 0-19	0.40%	0.70%	1.00%
Fatality Rate - 20-64	0.40%	0.70%	1.00%
Fatality Rate - 64+	0.10%	0.15%	0.20%

Using the above information, the following chart shows the estimate of the overall distribution of deaths statewide for the first eight weeks of a pandemic event:

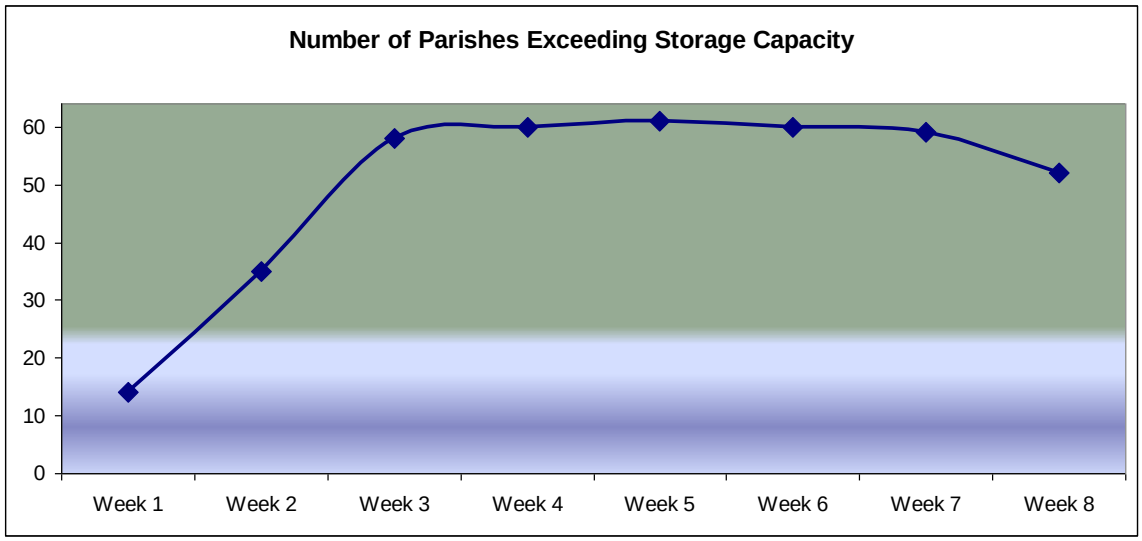


Given the attack and mortality rates assumed, the mean expected number of deaths is 8,677 with a 90% confidence level that the number of deaths would be between 8,250 and 9,118 (given the assumptions).

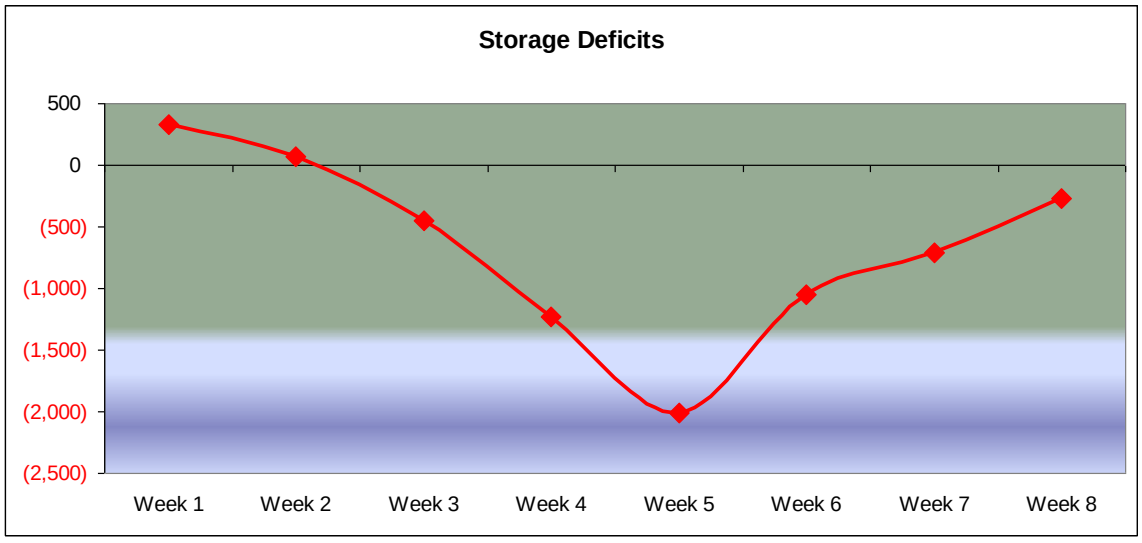
Resource Gap Analysis

With the estimates of the storage capability and the expected number of deaths, the final stage of preparedness analysis is to estimate the storage deficits that may occur during the initial eight week pandemic period. This storage deficit estimate also allowed an estimate of the potential number of refrigerated trucks (or equivalent asset) that may be needed during the event.

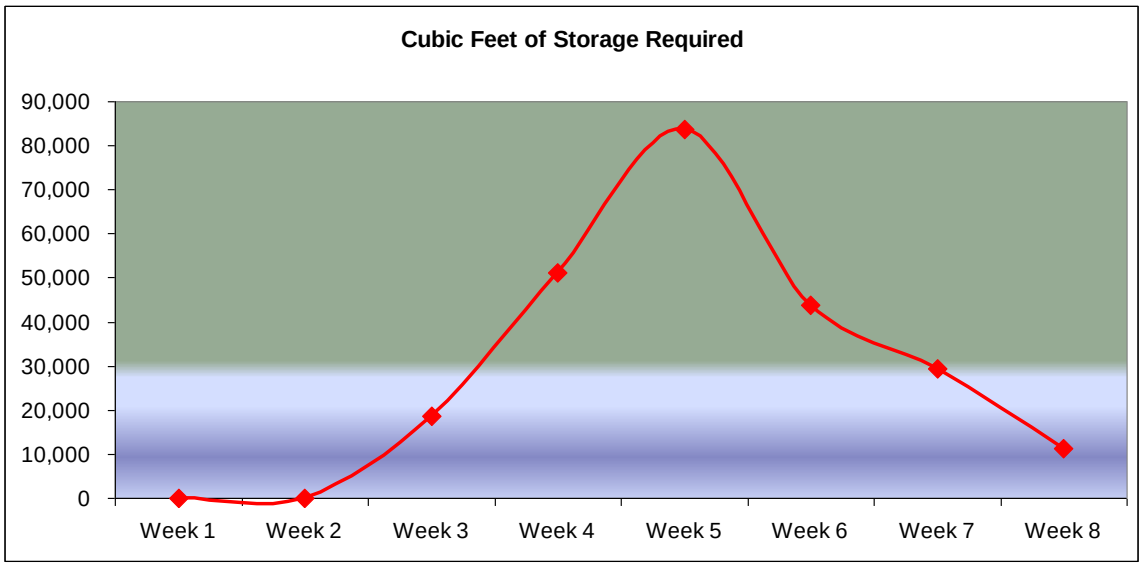
The following chart shows the estimate of the number of parishes that would exceed the known in-parish storage capacity during a pandemic:



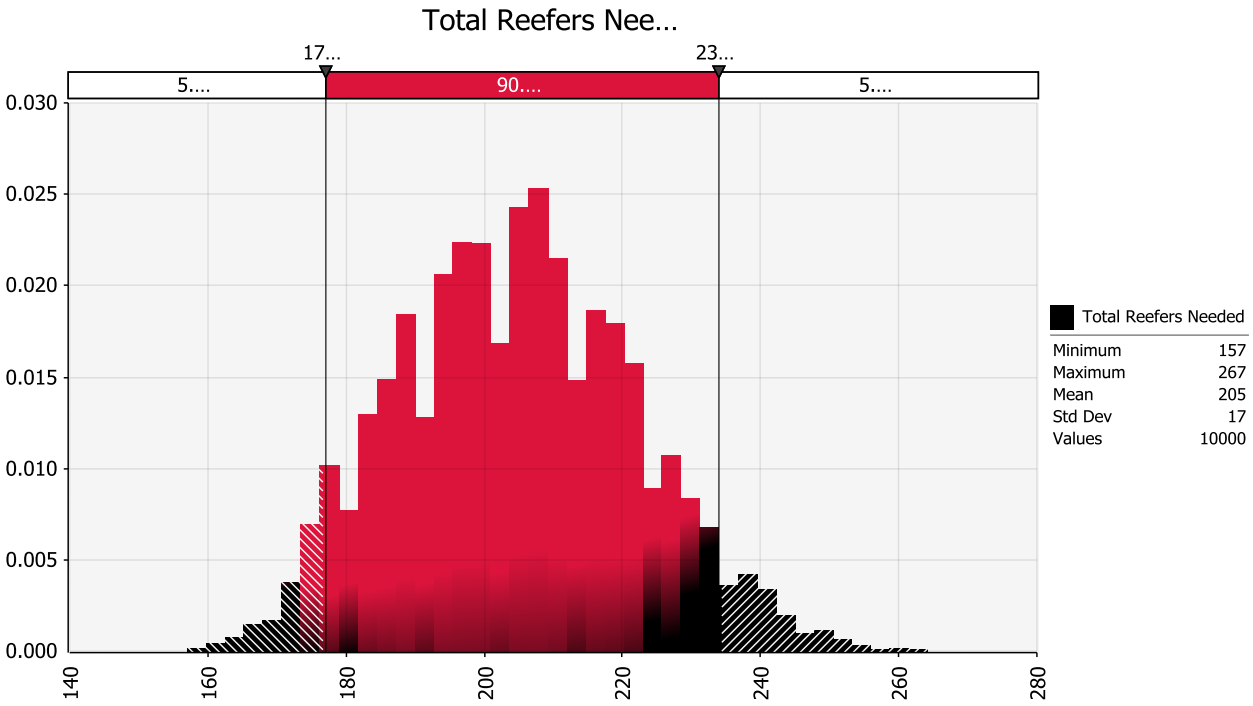
The following chart shows the storage deficit estimates:



These estimates translate into the estimated deficit of the cubic feet of storage:



Given these deficits, the probable cubic feet of storage needed, and a known minimum capacity of a refrigerated truck container, the estimate for a likely distribution of the number of refrigerated containers needed statewide during the event (NOTE – these are planning factors only and are highly sensitive to the assumptions used) is:



Testing, Training, and Exercise

Trainings and exercises will be incorporated into the multi-year training calendar (as required by and compliant with Homeland Security Exercise and Evaluation Program, or HSEEP) and as recommended by the United States Department of Homeland Security. These activities are coordinated through and documentation maintained by the DHH Center for Community Preparedness (CCP). Through a variety of exercises and trainings, parish and regional partners in the Mass Fatality partners participate in evaluations of readiness.

The Multi-Year Strategy and Program Management Plan will be maintained by CCP as a separate document from this Plan as it is updated on a near-weekly basis when trainings have been completed. It will be monitored and modified as appropriate.

Specifically, coroner's personnel should have awareness level and some handling training for biological and chemical agents. Typically a specialized team of at least four individuals should be trained to the HAZMAT Technician Level, so that they are prepared to enter a Hot Zone in Level A or B PPE. This provides the coroner two teams of two individuals, so that each team has a backup that can relieve the other when an evaluation takes longer than the thirty-minute air supply. The rest of the staff should be trained to use Level C PPE.

- Level A PPE consists of a self-contained breathing apparatus, with full-facemask cover, a fully encapsulated chemical resistant suit, and inner chemical/biological resistant hand covers and resistant safety boots/shoes.
- Level B PPE consists of a self-contained breathing apparatus, with full-facemask cover a chemical resistant suit, and inner and outer chemical/biological resistant gloves, and chemical resistant boots/shoes.
- Level C PPE consists of a full-face air purifying canister-equipped respirator, full body chemical resistant suit, inner and outer chemical/biological resistant gloves, and resistant boots/shoes.

In addition, coroner's personnel receive training from Louisiana State University on anthropology and techniques to assist in identification of forensic evidence.

Annual Review Process

The Mass Fatality Framework planning group shall review this Framework on an at-least annual basis, including prior to and after each threat level change. This includes the implementation of additional threat level activities and may require adjustments to the Framework as necessary.

Documentation - Incident Action Report (IAP)

Under NIMS, the appropriate method of tracking operational objectives, logistics movements, and safety issues is through the Incident Action Plan (IAP)[xix]. Through the assistance of the DHH OPH Documentation Coordinator at the DHH Emergency Operations Center, the DHH OPH Planning Section will be able to complete the appropriate sections of the IAP to track requests for assets, distribution of inventory, and documentation of communications with RSS or regional staff regarding antiviral dispensing sites.

An IAP must be created for every operational period, which may fluctuate as the event and response unfolds. IAPs are typically created for a 12-hour operational period, but may be created for shorter periods of time. IAPs may be created for operational periods up to 24-hours once an event/response has been underway for some time. Any reports required from the parish Coroner's offices shall be requested/obtained through the parish Office of Homeland Security and Emergency Preparedness.

While Louisiana and the federal government do not guarantee any reimbursement for resources used during a response, in the event that reimbursement becomes available, it will be important that accurate and comprehensive documentation be available. The IAP is a generally accepted mechanism for accurately and adequately tracking situational information.

IV. Logistics

While not every mass fatality scenario may have the need for environmental hazard assessment and decontamination of bodies prior to coroner investigation, it is important to mention in this Framework that the possibility strongly exists in Louisiana for fatalities as a result of chemical exposures (intentional or accidental) as well as terroristic activities. This Section of the Framework outlines considerations for decedents needing decontamination from substances, epidemic (typically biologic) causes of death, and management of victims from natural disaster. Many references and suggested logistics guidelines are adapted from the United States Army Soldier and Biological Chemical Command.

General Considerations

The coroner should consider establishing a resource annex to their disaster plan. This annex could specify where the coroner will acquire equipment that is normally used, i.e., PPE, ventilation fans, decontamination supplies, contaminated water run-off containers, waterproof tracking tags, refrigerated storage units. Various suppliers that may provide equipment to the coroner may include local hardware stores or vendors, surrounding fire departments, or the state's Department of the Environment.

- Additional considerations may include planning the location for a temporary morgue. Such locations should have a physical layout that can support the morgue operation (to include staff parking, refrigerated storage units, resource storage, etc.).
- Plans need to address all steps involved in processing contaminated remains: crime scene evaluation, recovery, initial evaluation of remains, decontamination, autopsy, embalming, final disposition.
- The coroner will need to establish and maintain three operations: processing remains from the incident, establishing a Family Assistance Center or bereavement center, and continuing to process the normal caseload.

Non-Routine Supplies

The coroner may need to approach other departments that normally use PPE and request if they can make a portion of their stock available to the coroner. It is unlikely that the coroner will have the ability to purchase and maintain a tremendous amount of PPE and it unlikely that those who have the PPE, but are not coroner investigators, would be inclined to handle human remains.

A suggested, but not all-inclusive, listing of supplies is included in the following table.

Equipment/Supplies	Possible Alternate Sources
Protective Clothing (gloves, boots, coats, hard hats, rain suits, and respirators, etc., as dictated by the situation)	CDC, Public Health, Environmental Health
Body bags (number and type)	DHH State Cache
Refrigerated (35 - 38° F) trucks with ramps, metal floors which allow decontamination, and shelves no higher than waist height (20 bodies per 40 foot trailer). Caution will be taken when using food, beverage or other consumer types of commercial vehicles to store and transport human remains. In most cases, these types of vehicles should not be returned to their prior service function.	Parish OEP
Tents and storage	Louisiana National Guard
Paint for numbering (1, 2, 3; P1, P2, P3; E1, E2, E3…)	Department of Transportation and Development
Flags for marking locations	
Plastic toe tags and Sharpie permanent pens	
Biohazard bags and boxes	Louisiana Hospital Association
Photography and filming equipment (No personal cameras allowed!)	Law Enforcement Crime Scene Investigation
Gridding, laser survey, GPS systems	Louisiana National Guard
Communication devices, e.g., radios and cell phones	Parish OEP
Writing or computer equipment with software (specified by Coroner) for scene data maintenance	
Coroner Forms for individual case records, scene log, etc. ▪ *Release of Copyright* ▪ *Disaster Scene: Death Investigation Record* or *DMORT Site Recovery Record* ▪ *Transportation Log*	
Identification badges for volunteers or employees not in uniform (log with ID number, name and job function)	Parish OEP
Body boards	Local EMS Providers

V. Security

During a public health emergency requiring mass fatality operations, security will play an essential role in the efficient operation of processing locations, remains storage operations, and temporary internment sites – especially in the presence of an intentional biological or chemical event.

Vulnerability in the Mass Fatality Process

Several of the components for consideration during a security assessment of the aforementioned susceptibility points are:

- Vulnerability of points of entry/exit;
- Ability to secure physical location, with appropriate refrigeration/power supply;
- Appropriateness of design of floor plan for protection of remains and assets;
- Need for physical barriers, for traffic flow and/or crowd control;
- Safety of location with existing lighting arrangements;
- Staging needs for staff – personnel as well as vehicles;
- Establishing and protecting landing zones as needed (e.g., for the delivery of Disaster Mortuary Operational Response Team's portable morgue unit); and
- Access control to facility or "designated areas for temporary refer units".

In order to complete the assessments listed above, a variety of law enforcement and security techniques will be utilized, including a physical sweep of the facility. For the temporary internment sites previously listed in the Concept of Operations, the assessments were completed by the Department of Corrections, including unique security needs for the inmate labor populations.

Basic List of Security Locations (by type and function)

The following are general security locations to anticipate:

- Incident Site.
- Morgue (jurisdiction's morgue, temporary incident morgue, and long-term examination center/sifting site, if one is required).
- Family Assistance Center(s)/Reception Center(s).
- Traffic Control at all sites.

Security for parish mass fatality operations will be coordinated through the local law enforcement agencies in consultation with the Louisiana State Police. Security includes appropriate handling of any security breaches of the remains locations (including the

incident location, as it may be a crime scene depending on the causal nature of the mass fatality), disturbances in public queuing, and other similar law enforcement related activities as outlined in their department guidelines. Security will be required throughout the length of the emergency, including when the site is not operational. Additional unarmed security may be provided through volunteers, according to suggestion from the lead law enforcement agency on a site-by-site basis.

Considerations have been made for several key success factors specific to each decedent processing or storage site.

- Traffic control and crowd control are primary concerns. In many regions, law enforcement agencies coordinating with parish OHSEPs have extensive experience in mass crowd control. Examples of historical crowd control include the yearly Mardi Gras parades and festivities, harvest-specific festivals, and other events.
- Perimeter control, both for the safety of staff/volunteers as well as positive control of assets and decedent inventory, is essential to the success of contagion confinement and respectful handling of remains. Again, due to the nature of the economic traffic of the State as well as international attractions for tourism, the experience of law enforcement in the region to handle perimeter access has been proven repeatedly.
- Evacuation plans for each specific processing location (as well as portions of a parish in accordance with HazMat procedures) in response to security breaches or other emergencies that include identification of a location for reconvening all staff, volunteers, and clients. This may include the determination and utilization of specialized units, such as canine, explosive ordinance disposal, and tactical support. Recent events throughout the State have shown that law enforcement is capable and prepared to evacuate entire populations (such as Hurricanes Gustav/Ike evacuation in August 2008, the largest evacuation of a population to date within the United States).

Rules of Engagement for Law Enforcement Personnel

The rules of engagement for each officer assigned to the security detail will be consistent with each officer's parent department/agency and will be in compliance with State and federal rules for engagement. U.S. Marshal(s) will be deployed for State support along with the state or any federal assets. As per the State Emergency Operations Plan previously referenced, Louisiana National Guard may be utilized along with the LSP at the discretion of the parish OHSEP. Regional law enforcement will be able to request additional resources through their standing procedures and in compliance with the parish OHSEP EOC guidelines. Regional law enforcement will use the continuum of force, as appropriate, per their training and certifications.

VI. Communications

Inherent in the routine work of the Coroner is redundant communications methods for notification of fatality events. These systems have backup processes as well as multi-tier contact levels due because of the type of role the Coroner's staff has in the parish. Methods within the parishes of Louisiana include radios, facility phones, and cellular phones. Personal communications also may be utilized, depending of the proximity of offices. Communications will be compliant with the ICS structure and NIMS procedures.

In the case of mass fatality operations, communications are all routed through the DHH Bureau of Media and Communications due to the extensive nature of the public health emergency. This ensures consistent messaging, sensitivity for the greater community in delivery tactics, and can focus appropriate communications to the different communities, thus allowing the Coroner's Office to perform the critical task of retrieval, identification, and release. The Coroner will have a liaison specifically assigned for message crafting, input, and collaboration on event details for factually accuracy as well as interaction with primary spokespersons, with potential media interaction in conjunction with their appearances.

Designated Spokespersons

Primary Spokespersons

- Secretary of DHH
- State Health Officer
- DHH Deputy Chief of Staff
- Director, Bureau of Media and Communications
- Office of Public Health Assistant Secretary
- Office of Public Health Medical Director
- State Epidemiologist
- Center for Community Preparedness Director
- Regional Medical Directors

Secondary Spokespersons

- Regional Administrators
- Public Health Emergency Response Coordinators
- Center for Community Preparedness Public Information Officer
- Bureau of Media and Communications Public Information Officers
- Designated staff from the Office of Mental Health

Information Verification and Approval

Three people should officially clear a document before it's released from DHH.

1. The Secretary of DHH, State Health Officer or his/her designee.
2. The Director of the Bureau of Media and Communications or, in his/her absence, the Center for Community Preparedness Communications Officer or Public Information Officer.
3. The subject matter expert, which frequently may be the Coroner.

Others, such as agency legal counsel, may provide input and suggestions as needed.

Information Release Authorizations

Information release will be handled in accordance with the provisions of the Louisiana Emergency Health Powers Act[xx] and Emergency Support Function 15 – Public Information Annex of the State of Louisiana Emergency Operations Plan (previously cited). Further, other federal and State laws/regulations may be applicable, such as the Healthcare Information Portability and Privacy Act or laws that govern federal investigations surrounding events associated with potential acts of terrorism. The coordination of disseminated information will be directed by BMAC.

Further information on the types of information and methods of release can be located in the DHH Emergency Communications Plan, revision April 2010.

Communicating with Special Populations

The Bureau of Media and Communications has developed specialized plans and materials to reach special populations including:

- Hispanic Residents
- Vietnamese Residents
- Low Income
- Low Literacy
- Rural Populations
- Disabled (Physical & Mental)

Considerations regarding special populations also consider Louisiana's role as a State with a strong tourism industry as well as International trade as well as political connections. Efforts with travel and tourism boards as well as foreign missions are also considered in enhanced tactics during an emergency response.

VII. Demobilization

Considerations for demobilization begin simultaneously with the commencement of operations, in order to provide for a fluid transition of operations. The Coroner is responsible for initiating phase-down. Deactivation will be coordinated with the DHH OPH Emergency Operations Center and the parish Emergency Operations Center. Demobilization will be in compliance with NIMS procedures. Demobilizations also may include stress management interventions for employees, as determined by the Coroner.

Disengagement in Mass Fatality Operations

1. Coroners' Officers in Charge and Team Leaders are responsible for documentation requirements when handling remains. Process improvement documentation (such as challenges, changes that were made to guidelines/procedures, unique circumstances and other pertinent information) are maintained by parish OHSEPs.
2. The Coroner completes a detailed report on the deposition of each body, but does not 'file' or complete a summary per incident. Every decedent or remains is treated as a separate incident. Any requests for information further than the public vital statistics records will be conducted in conjunction with the parish Office of Homeland Security and Emergency Preparedness.
3. The OHSEP After Action Report will be completed no later than 30 days after the mass fatality plan has been deactivated, per FEMA requirements[xxi].
4. The Coroner's Office will follow procedures for demobilization as required by organizations that have loaned facilities, refrigerated vehicles, equipment, and supplies. Typically, DMORT teams may assist in the demobilization process.
5. All original records pertaining to identification, post mortem documentation, and ante-mortem records will be transferred to the Coroner's Office and maintained in accordance with the Coroner's Policies and Procedures.
6. A Long-Term Examination Center may continue to operate after the majority of mass fatality operations cease to process remains and belongings. When the Long-Term Examination Center is deactivated, deactivation will be in compliance with NIMS procedures and demobilization will follow procedures used for demobilization of the incident site and morgue.

VIII. Endnotes

[i] Louisiana Governor's Office of Homeland Security and Emergency Preparedness, Hazard Mitigation Plan Update, Volume I, April 14, 2008. (http://gohsep.la.gov/mitigation/statehazmitplan_08/volI/SHMPVolI_FINAL_041408.pdf)

[ii] United States Department of Homeland Security, Federal Emergency Management Agency. National Response Framework, January 2008. (http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf)

[iii] US Army Soldier and Biological Chemical Command (SBCCOM). Guidelines for Mass Fatality Management During Terrorist Incidents Involving Chemical Agents. Revision 1, December 2003. (http://www.ecbc.army.mil/downloads/cwirp/ECBC_guidelines_mass_fatality_mgmt.pdf)

[iv] Commonwealth of Virginia, Department of Health, Office of the Chief Coroner. Guidelines for Managing a Mass Fatality Event. June 8, 2005. (http://169.134.225.4/MedExam/documents/Mass_Guidelines.pdf)

[v] Gursky, Elin A. Joint Task Force Civil Support Mass Fatality Working Group: A Working Group Consensus Statement on Mass-Fatality Planning for Pandemics and Disasters. HSI Journal of Homeland Security. July 2007. (http://www.homelandsecurity.org/journal/Default.aspx?oid=160&ocat=1#endref22)

[vi] Ibid.

[vii] United States Department of Homeland Security, Federal Emergency Management Agency. Federal Preparedness Circular, FPC 65. July 26, 1999. (http://www.fas.org/irp/offdocs/pdd/fpc-65.htm) with revision June 15, 2004. (http://www.fema.gov/pdf/library/fpc65_0604.pdf)

[viii] State of Louisiana Emergency Operations Plan, June 2007. (http://www.ohsep.louisiana.gov/plans/EOP.pdf) with amendments a) Executive Order BJ 08-32 - Emergency Operations Plan (http://www.ohsep.louisiana.gov/proclamations/exorder200832.htm) and b) Executive Order BJ 08-94, Amendment to Executive Order No. BJ 08-32- Emergency Operations Plan (http://www.ohsep.louisiana.gov/proclamations/exorder200832_amendment.htm)

[ix] Hogan, David E. and Jonathan L. Burstein. Disaster Medicine, Second Edition. Lippincott, Williams & Wilkins, Philadelphia: 2007. p402.

[x] Ibid. p412.

[xi] Ciottone, Gregory R. et al. Disaster Medicine, Third Edition. Elsevier/Mosby, Boston: 2006. p409.

[xii] Hanzlick R. et al. The Coroner/Coroner's Guide for Contaminated Deceased Body Management. American Journal of Forensic Medicine Pathology. 2009 Dec;30(4):327-38.

[xiii] Centers for Disease Control and Prevention, MMWR Recommendations and Reports. Coroners, Coroners, and Biologic Terrorism: A Guidebook for Surveillance and Case Management. June 11, 2004 / 53(RR08);1-27. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5308a1.htm)

[xiv] Hogan, David E. and Jonathan L. Burstein. Disaster Medicine, Second Edition. Lippincott, Williams & Wilkins, Philadelphia: 2007. p408.

[xv] Louisiana Governor's Office of Homeland Security and Emergency Preparedness, Hazard Mitigation Plan Update, Volume I, April 14, 2008. (http://gohsep.la.gov/mitigation/statehazmitplan_08/volI/SHMPVolI_FINAL_041408.pdf)

[xvi] Santa Clara County Public Health Department. Managing Mass Fatalities: A Toolkit for Planning. (http://www.sccgov.org/portal/site/phd/agencychp?path=%2Fv7%2FPublic%20Health%20Department%20(DEP)%2FAdvanced%20Practice%20Center%20(APC)%2FManaging%20Mass%20Fatalities)

[xvii] Ohio Funeral Directors Association. The Provision of Family Assistance and Behavioral Health Services in the Management of Mass Fatalities Resulting from a Pandemic Influenza in the United States. April 25, 2006.

[xviii] Santa Clara County Public Health Department. Managing Mass Fatalities: A Toolkit for Planning. (http://www.sccgov.org/portal/site/phd/agencychp?path=%2Fv7%2FPublic%20Health%20Department%20(DEP)%2FAdvanced%20Practice%20Center%20(APC)%2FManaging%20Mass%20Fatalities)

[xix] NIMS ICS template forms comprising IAP. (http://www.fema.gov/emergency/nims/JobAids.shtm)

[xx] Louisiana Emergency Powers Act, 2003. R.S. 29:760; 761-762; 769; 40:5, 7-10 (http://law.justia.com/louisiana/codes/13/13.html)

[xxi] United States Department of Homeland Security, Federal Emergency Management Agency. Comprehensive Preparatory Guide (CPG) Training 101. March 2009.